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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,619

04/02/2004

Gregory J. Boss

YOR920040054US1

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01/13/2009

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EXAMINER

TRUONG, CAMQUY

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

01/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,619	<b>Applicant(s)</b> BOSS ET AL.	
	<b>Examiner</b> CAMQUY TRUONG	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/2/04 &amp; 8/16/06</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Claims 1-30 are presented for examination.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-30 are rejected under 35 U.S.C 101 because they are directed to non-statutory subject matter.

Claim 1 and 12 are rejected under 35 U.S.C. 101 because the claimed inventions directed to a method claims that recited mental steps that not tied to a statutory category such as machine or manufacture.

Claim 21 defines "system" in the preamble and the body of the claim recites "a performance agent", "a resource allocator", "a resource identification module". A performance agent, a resource allocator, a resource identification module appear to be software module. Therefore, claim 21 is non-statutory because it recites claims that comprises software per se embodiments.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 12-19 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claims is not clearly understood

i. As to claim 12, line 11, it is not clearly indicated whether “level” refers to “a performance level” in line 7. If it is the same applicant should use the same language.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 12-15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Steele et al. (U.S. 2004/0117476).**

5. As to claim 12, Steele teaches the invention as claimed including a method for identifying an optimum allocation of a plurality of component resources and a plurality of computing resources amongst a plurality of users, the method comprising:

specifying a set of requirements for the optimum allocation of the component resources and the computing resources (CPU usage / disk space usage, I/O or backbone traffic per system, paragraph 57) (requirement resources of each enterprise system, claim 10, lines 15-16; paragraph 62);

identifying a first set of metrics that indicate a performance level at which a component resources and computing resources are replaced (performing load analysis using the collected performance metrics and pre-determined performance thresholds, claim 10, lines 22-23; paragraphs 57-58; paragraph 63);

identifying a second set of metrics that indicate a performance level at which the component resources and the computing resources are upgraded (performing load analysis using the collected performance metrics and pre-determined performance thresholds, claim 10, lines 22-23; paragraphs 57-58; paragraph 63);

correlating the first set of metrics and the second set of metrics with a user's job description and level to create a metrics table (store as the performance metrics databases, paragraph 57);

invoking an automatic hardware allocation utility, wherein the first set of metrics, the second set of metrics and the metrics table are made available to the automatic hardware allocation utility for consideration (paragraph 58); and

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receiving an optimum allocation of the component resources and the computing resources from the automatic hardware allocation utility, wherein the specified set of requirements are satisfied ( reallocate the appropriate resources, paragraph 58; paragraph 63).

6. As to claim 13, Steele teaches collecting a plurality of performance data; and wherein the collected performance data comprises an association of a plurality of time percentages with an application process operating on the computing resource (paragraph 57).

7. As to claims 14-15, Steele teaches collecting the performance data comprises logging a plurality of events occurring on the computing resource (paragraph 37).

8. As to claim 20, Steele teaches:

analyzing the collected performance data to determine if there exists an actionable item (analyzed the metric, paragraph 58);

if an actionable item exists, applying a plurality of metrics to filter the collected performance data ( comparing loads on resources and determines whether an enterprise is under-utilizing or over-utilizing resource, paragraph 58); and

automatically allocating the computing resources by at least one action based on the actionable item: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource (automatically reallocate the

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disk drives within its control, paragraph 58).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**9. Claims 16-19 are rejected under 35 U.S.C. 103(a) as unpatentable of Steele et al. (U.S. 2004/0117476), as applied to claim 12 above, in view of Deng et al. (U.S. 2001/0039581).**

10. As to claim 16, Steele does explicitly teach any one of the first set of metrics and the second set of metrics comprises a job description of a user. However, Deng teaches any one of the first set of metrics and the second set of metrics comprises a job description of a user (predicting resource requirement to the request, paragraph 12).

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grumann to incorporate the teaching of any one of the first set of metrics and the second set of metrics comprises a job description of a user as taught by Deng in order gain the advantage of improving the capability of the resource allocation to be more adaptive and dynamic.

12. As to claim 17, Deng teaches any one of the first set of metrics and the second set of metrics comprises a job level of the user (request classification, paragraph 14).

13. As to claims 18-19, Grumann teaches any one of the first set of metrics and the second set of metrics comprises an allowable component performance of the component correlated with a user's job description and level (in some cases, reallocation cannot take place at the control plane level ... , paragraph 58, paragraph 67).

14. **Claims 1-11 and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable Grumann et al. (U.S. 2002/0165892) in view of Steele et al. ( U.S. 2004/0117476 A1).**

15. As to claims 1 and 21, Grumann teaches the invention substantially as claimed including: a method of allocating a plurality of computing resources among a plurality of users, comprising:

collecting a plurality of performance data (each of the data collection engines 121 may include one or more input mechanisms and component to collect or derive information (performance metric) from a particular source, paragraphs 43- 44);

applying a plurality of policy rules to the collected performance data (according to a user-modifiable set of rules 127, paragraph 46);



analyzing the collected performance data to determine if there exists an actionable item (the data analysis engine 125 determines which collected parameters are to be associated with a particular output metric, paragraph 46);

if an actionable item exists, applying a plurality of metrics to filter the collected performance data (if an ARM agent average response time filtered by the specific applications making up the service is collected by the data collection engine 121, the collected information may be translated into the service time output metric for that service, paragraph 54); and

automatically allocating the computing resources (optimum allocation of these and other shared resources, paragraph 21) by at least one action based on the actionable item: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource.

16. Grumann does not explicitly teach automatically allocating the computing resources by at least one action based on the actionable item: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource. However, Steele teaches automatically allocating the computing resources by at least one action based on the actionable item: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource (automatically reconfiguring network component, by the control plane manager, based on the recommended allocation, paragraph 10; claim 10, lines 28-30).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grumann to incorporate the teaching of automatically allocating the computing resources by at least one action based on the actionable item: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource as taught by Steele in order to gain the advantage of eliminating direct maintenance and upgrade costs.

18. As to claims 2 and 22, Grumann teaches the collected performance data comprises a time percentage in which the computing resource is engaged in an excessive paging activity (paragraphs 12 and 48).

19. As to claims 3 and 23, Grumann teaches the collected performance data comprises a time percentage in which the computing resource is engaged in an excessive CPU utilization (paragraphs 32-33 and 50).

20. As to claims 4 and 24, Grumann teaches the collected performance data comprises a time percentage in which the computing resource is constrained by input / output devices (paragraph 50).

21. As to claims 5 and 25, Grumann teaches the collected performance data comprises an association of a plurality of time percentages with an application process

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operating on the computing resource (paragraph 3).

22. As to claims 6-7 and 26-27, Grumann teaches collecting the performance data comprises logging a plurality of events occurring on the computing resource (paragraph 45).

23. As to claims 8 and 28, Steele teaches the plurality of metrics comprise a job description of a user (paragraph 63).

24. As to claims 9-11, and 29-30, Steele teaches the plurality of metrics comprise a job level of the user (paragraph 67).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAMQUY TRUONG whose telephone number is (571)272-3773. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/  
Primary Examiner, Art Unit 2194

Camquy Truong

December 18, 2008